Index of Claims

Application/Control No.

09/449,185 Examiner

Brian D. Nguyen

Applicant(s)/Patent under Reexamination

MICHALEWICZ ET AL.

Art Unit

2661

| <b>√</b> | Rejected |
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| =        | Allowed  |

- (Through numeral)
Cancelled

Restricted

Non-Elected

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| Cla                  | aim      | m Date       |                     |           |                                     |                 |                                     | Cla            | aim  | Date         |   |                        |           |                 |                         |                         | Cla                | aim ·        |           | Date               |          |              |       |            |          |              |          |          |          |          |          |          |          |
|----------------------|----------|--------------|---------------------|-----------|-------------------------------------|-----------------|-------------------------------------|----------------|--|--------------|---|------------------------|-----------|-----------------|-------------------------|-------------------------|--------------------|--------------|-----------|--------------------|----------|--------------|-------|------------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|
| l                    | <u> </u> | ۱.,          |                     |           |                                     |                 |                                     |                | 1  |              |   | _                      | <u>-a</u> |                 |                         |                         |                    |              |           | Ì                  |          |              |       | <u>m</u>   |          |              |          |          |          |          |          |          |          |
| Final                | Original | 5/3/05       |                     |           |                                     |                 |                                     |                |  |              |   | Final                  | Original  |                 | 1                       |                         |                    |              |           |                    |          |              | Final | Original   |          |              |          |          |          |          |          |          |          |
| [                    | ő        | <u>بې</u>    |                     |           |                                     |                 |                                     |                |  |              |   | i I                    | 5         |                 |                         |                         |                    |              |           |                    |          |              | ΙŒ    | Öriç       |          |              |          |          |          |          |          |          |          |
| -                    |          | ┡            | $\sqcup$            |           | _                                   | <u> </u>        | ┢                                   | ┡              | ₩  | ┝            |   |                        |           | $\vdash \vdash$ | _                       | +                       | 4                  | ┡            |           | 4                  | _        |              |       |            |          | $\Box$       | _        |          |          | _        |          | $\dashv$ | _        |
| 1                    | 1        | =            | $\vdash$            | _         |                                     | <u> </u>        | ├                                   | ├—             | <del> </del>                                     | <del> </del> | 1 | <u> </u>               | 51        | $\vdash$        | _                       | _                       | +                  | ₩.           | _         | 4                  | 4        |              |       | 101        |          | -            | _        | $\Box$   |          |          |          | _        | 4        |
| 2                    | 2        | =            | $\vdash$            |           | <u> </u>                            | -               |                                     | ┢              | ┾  | ⊢            |   | <u> </u>               | 52        | $\vdash$        | -                       | +                       | +                  | -            |           | _                  |          |              |       | 102        |          | +            | _        |          |          | $\dashv$ | _        | $\dashv$ | 4        |
| 3                    | 3        | ۱Ē           | ┢                   |           | $\vdash$                            | $\vdash$        | ⊢                                   | ⊢              | $\vdash$   | ├            | ł | <u> </u>               | 53<br>54  | $\vdash$        | -                       | +                       | +-                 | ┢            | $\vdash$  | -                  | -        |              |       | 103        |          |              | $\dashv$ |          |          | _        | -        | $\dashv$ | -        |
| -                    | 5        | H            | ╁┼                  |           | -                                   | $\vdash$        | ┢                                   | ┢              | H  | ┢            | ł |                        | 55        | $\vdash$        | +                       | +                       | ╁                  | ┢            |           | -                  | $\dashv$ | -            |       | 104<br>105 |          | $\dashv$     | -        | -        |          | _        | $\dashv$ | $\dashv$ | _        |
| $\vdash$             | 6        | <del> </del> | $\vdash$            |           | ├─                                  |                 | -                                   | ╁╾             | ╁  | ╁╾           | ł | -                      | 56        | $\vdash$        | +                       | +-                      | ╁                  | ╁            | $\vdash$  | +                  | -        |              |       | 106        | -        | $\dashv$     | $\dashv$ | $\vdash$ | -        | -        | $\dashv$ | $\dashv$ | _        |
| -                    | 7        | H            | $\vdash$            |           | $\vdash$                            |                 | +                                   | t              | $\vdash$   | 一            | 1 |                        | 57        | $\vdash$        | ┰                       | +                       | ╁                  | $\vdash$     | $\dashv$  |                    | $\dashv$ | -            |       | 107        |          | $\dashv$     | $\dashv$ | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ | _        |
| 4                    | 8        | =            | $\vdash$            |           | $\vdash$                            |                 | <del> </del>                        | 一              | ┢  | -            |   |                        | 58        | $\vdash$        | ╅                       | 十                       | ╁                  | $\vdash$     |           | 十                  | $\dashv$ | •            |       | 108        |          | $\dashv$     |          | -        |          | $\dashv$ | $\dashv$ | $\dashv$ |          |
| 5                    | 9        | =            | $\Box$              | _         | T                                   |                 | T                                   | $\vdash$       | T  | $\vdash$     |   |                        | 59        | $\vdash$        | +                       | +                       | ╁                  | -            | $\dashv$  | 十                  | $\dashv$ | ŀ            |       | 109        |          | $\dashv$     | ┪        |          |          |          | $\dashv$ | $\dashv$ | 一        |
| 6                    | 10       | =            |                     | •         |                                     | T-              | İ                                   | 1              | T  | Г            |   |                        | 60        | $\Box$          | $\top$                  | $\top$                  | +-                 |              |           | T                  | 1        |              |       | 110        | $\neg$   | $\neg$       | ┪        |          |          | $\neg$   |          | 寸        |          |
| 7                    | 11       | =            | П                   |           |                                     | Г               | T                                   | Г              |  | Π            | 1 |                        | 61        | $\Box$          | $\dashv$                | $\top$                  | 1                  |              | $\Box$    | 十                  |          | ı            |       | 111        | $\neg$   | 一            | $\dashv$ | $\neg$   | $\neg$   | $\dashv$ | 寸        | $\dashv$ | $\dashv$ |
| 8                    | 12       | =            |                     |           |                                     |                 |                                     |                |  |              |   |                        | 62        |                 | 1                       | $\top$                  | Т                  |              | $\sqcap$  | $\top$             |          | ľ            |       | 112        |          | _            |          |          |          |          | 寸        | $\dashv$ | $\neg$   |
| 9                    | 13       | =            |                     |           |                                     |                 |                                     |                |  |              |   |                        | 63        |                 |                         |                         | $\perp$            |              |           |                    |          | İ            |       | 113        |          | $\exists$    |          |          |          | -        | ヿ        | $\dashv$ | $\neg$   |
| 10                   | 14       | =            | Ш                   |           |                                     |                 |                                     | 匚              | 匚  |              |   |                        | 64        |                 | $oldsymbol{\mathbb{I}}$ | $oldsymbol{\mathbb{T}}$ | $oxed{\mathbb{L}}$ |              |           |                    |          | [            |       | 114        |          |              |          |          |          |          |          | $\neg$   | $\neg$   |
|                      | 15       |              | $\Box$              |           | $\Box$                              |                 | 匚                                   | $\Box$         | oxdot  |              |   |                        | 65        | $\Box$          |                         |                         |                    |              |           | $\Box$             |          |              |       | 115        |          |              |          |          |          |          |          |          |          |
|                      | 16       | _            | Щ                   |           | oxdot                               | L               | $\Box$                              |                | <u> </u>   |              |   |                        | 66        | Ц               | $\perp$                 | $\Box$                  |                    |              |           | $oldsymbol{\perp}$ | _]::     | ]            |       | 116        |          |              | ╝        |          |          |          |          | $\Box$   |          |
| <u> </u>             | 17       | _            | $\sqcup$            |           | _                                   |                 | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | L              | <u> </u>   | Ш            |   | <u> </u>               | 67        | $\sqcup$        | $\perp$                 | $\perp$                 | 1                  | $oxed{oxed}$ |           |                    | _ ::     |              |       | 117        | $\Box$   | _[           | _[       |          |          |          | $\Box$   | $\Box$   | $\Box$   |
| <u></u>              | 18       | <u> </u>     | $\sqcup$            |           |                                     |                 | L                                   | _              |  | _            |   |                        | 68        | $\sqcup$        | $\perp$                 | _                       | $oldsymbol{\perp}$ | <u> </u>     |           | $\perp$            | _ ::     |              |       | 118        | _        |              | _        |          |          |          | $\perp$  |          |          |
|                      | 19       | <u> </u>     | $\sqcup$            | _         | _                                   | L               | _                                   | _              | _  |              |   |                        | 69        | $\sqcup$        | 4-                      | $\perp$                 | _                  | L            | $\Box$    | _                  | _ ::     |              |       | 119        |          | $\perp$      | _        | _        |          |          | $\Box$   | $\sqcup$ | _        |
|                      | 20       | _            | $\vdash$            |           |                                     |                 | _                                   | <u> </u>       | <u> </u>   |              |   |                        | 70        | $\sqcup$        | $\perp$                 | $\bot$                  |                    |              | _         | 4                  | -        | -            |       | 120        | _        |              | _        | _        | $\dashv$ | _        |          | $\dashv$ | _        |
|                      | 21       | ļ.           | $\vdash$            | _         | <u> </u>                            | <u> </u>        | _                                   | <u> </u>       | ⊢  | _            |   |                        | 71        | <b></b> -       | -                       | _                       | -                  | <u> </u>     | $\dashv$  | _                  | 4        |              |       | 121        |          | $\dashv$     | 4        | _        | _        | _        | _        | ┙        | Ц.       |
| 11                   | 22<br>23 | =            | $\vdash \vdash$     | $\dashv$  | _                                   | H               | -                                   | ┢              | ├  | $\vdash$     |   |                        | 72        |                 |                         | -                       | +                  | <u> </u>     | $\dashv$  | +                  |          | -            |       | 122        |          | 4            | 4        | _        | _        | _        | _        | 4        | _        |
| 13                   | 24       | =            | $\vdash$            | -         | $\vdash$                            | H               |                                     | -              | ┢  | _            |   |                        | 73<br>74  | ⊢⊹              | -                       | +                       | +                  | $\vdash$     |           | +                  | - :      | ⊪            |       | 123        | $\dashv$ |              | $\dashv$ |          |          | $\dashv$ | -        | -        | 4        |
| 13                   | 25       | F            | $\vdash$            | _         | -                                   | $\vdash$        | $\vdash$                            | ┝              | ┢  |              |   |                        | 75        | -               | +                       | +-                      | +                  | -            | $\dashv$  | +                  | -        | <b>::: -</b> |       | 124<br>125 |          | $\dashv$     |          | $\dashv$ |          |          |          | $\dashv$ | 4        |
| 14                   | 26       | =            | $\vdash$            | $\exists$ | -                                   |                 | -                                   | $\vdash$       | ╁  |              |   |                        | 76        | $\vdash$        | +                       | +                       | +                  | ╁            | $\dashv$  | +                  |          | ⊪            | -     | 126        | $\dashv$ |              | $\dashv$ | -        |          |          |          | $\dashv$ | $\dashv$ |
| 15                   | 27       | =            |                     | _         |                                     |                 | ┢                                   | -              | ┢  | -            |   | $\vdash$               | 77        | $\vdash$        | +                       | +                       | +-                 | H            | -         | +                  | - :      | -            | _     | 127        | -        | $\dashv$     | ┥        | $\dashv$ | $\dashv$ |          | $\dashv$ | +        | $\dashv$ |
| 16                   | 28       | =            |                     | _         |                                     | $\vdash$        | ┢                                   | $\vdash$       | <u> </u>   |              |   |                        | 78        | $\vdash$        | +                       | +                       | +                  | H            | $\vdash$  | $\dashv$           | -        | -            | -     | 128        | ┪        | +            | ┪        | -        | -        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
| 17                   | 29       | =            |                     |           |                                     |                 | ┪                                   | _              | 一  |              |   |                        | 79        |                 | +                       | ╁                       | +                  | H            | $\dashv$  | _                  | ,        | H            |       | 129        | _        | +            | ┪        | ᅥ        | ᅱ        | $\dashv$ | +        | $\dashv$ | $\dashv$ |
| 18                   | 30       | =            |                     |           |                                     |                 |                                     | <u> </u>       |  |              |   |                        | 80        | $\Box$          | $\top$                  | +                       | ✝                  | m            | $\exists$ | _                  | -        |              |       | 130        | _        | 1            | ┪        | 一        | ᅥ        | $\dashv$ | $\dashv$ | $\dashv$ |          |
|                      | 31       |              |                     |           |                                     |                 |                                     |                |  |              |   |                        | 81        |                 | T                       |                         | T                  |              |           | 1                  | ١        |              |       | 131        | 一        | 7            | 7        | _        | ᅦ        | 一        | 寸        | $\dashv$ | $\neg$   |
| 19                   | 32       | =            |                     |           |                                     |                 |                                     |                |  |              |   |                        | 82        |                 | $\top$                  |                         | T                  |              |           | T                  | 7::      |              |       | 132        | ヿ        |              | T        | ヿ        | 一        | $\neg$   | ヿ        | ヿ        | 7        |
| 20                   | 33       | =            | $\square$           |           |                                     |                 |                                     |                |  |              |   |                        | 83        |                 |                         |                         | Ι                  |              |           |                    |          |              |       | 133        |          | T            | ╗        | ヿ        | $\dashv$ |          | $\neg$   | $\dashv$ | $\neg$   |
| 21                   | 34       | Ξ            | П                   |           |                                     |                 |                                     |                |  |              |   |                        | 84        |                 |                         | $\perp$                 |                    |              |           |                    |          |              |       | 134        |          |              | J        |          |          | _        |          |          | _1       |
| 22                   | 35       | Ξ            | Ш                   | _         | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ |                 |                                     |                |  |              |   |                        | 85        |                 |                         |                         |                    |              |           | $oldsymbol{\perp}$ | _];;     |              |       | 135        |          | $\Box$       |          |          |          |          |          |          |          |
| 23                   | 36       | =            | Ш                   | _         | L_                                  | L_              | $oxed{oxed}$                        | <u> </u>       | $\perp$  |              |   |                        | 86        | $\sqcup \bot$   | 1                       | Ţ                       | L                  | Ш            |           |                    | ╝        |              | ]     | 136        |          | $oxed{\bot}$ |          |          | $\Box$   |          | $\Box$   |          | _]       |
| $\vdash$             | 37       |              | $\sqcup$            | _         |                                     | $\Box$          | Щ                                   | <u> </u>       | <u> </u>   |              |   |                        | 87        | Ш               | $\perp$                 | $\perp$                 | $\perp$            | Ш            | $\Box$    | _                  | _        |              | ]     | 137        |          | $\Box$       | J        | $\Box$   | $\Box$   |          | $\Box$   | $\Box$   |          |
| <u> </u>             | 38       | <u> </u>     | $\vdash \downarrow$ | _         | Ш                                   |                 | igspace                             | <del> </del> _ | $\vdash$   | Щ            |   | L                      | 88        | $\sqcup \bot$   | 4                       | +                       | $oldsymbol{\perp}$ | Ш            | Ц         | 4                  | _        | 1            |       | 138        |          | $\perp$      | _        |          |          |          | _        | $\perp$  | 4        |
| $\vdash\vdash\vdash$ | 39<br>40 |              | $\vdash \downarrow$ |           | Н                                   |                 | Н                                   | ├_             | $\vdash$   | Н            |   | <u> </u>               | 89        | $\vdash \vdash$ | +                       | +                       | +                  |              | $\dashv$  | +                  | 4        | -            |       | 139        | _        | $\perp$      | 4        |          |          | _        | _        | $\dashv$ | _        |
| 24                   |          | <u> </u>     | $\vdash$            | -         | Н                                   | <u> </u>        | $\vdash$                            | <u> </u>       | <del>  -</del>                                   | Н            |   | $\vdash$               | 90        | $\vdash \vdash$ | +                       | +                       | +                  | $\vdash$     | $\dashv$  | +                  | -        |              |       | 140        |          | $\dashv$     | 4        | _        |          |          | 4        | $\dashv$ | 4        |
| 24<br>25             | 41<br>42 | =            | $\vdash \vdash$     | $\dashv$  | Н                                   |                 | Н                                   | -              | <del>                                     </del> | Н            |   |                        | 91<br>92  | $\vdash$        | +                       | +                       | +                  | Н            | 4         | +                  | - :      | ŀ            |       | 141        | _        | $\dashv$     | 4        | _        | _        | _        | 4        | 4        | 4        |
| 26                   | 43       | =            | $\vdash$            | $\dashv$  | $\vdash$                            | Н               | Н                                   | $\vdash$       | -  | Н            |   |                        | 93        | $\dashv$        | +                       | +                       | +                  | $\vdash$     | $\dashv$  | +                  | -411     | ⊪            |       | 142        |          | $\dashv$     | -        | $\dashv$ | -        | -        | +        | $\dashv$ | -        |
| 27                   | 44       | =            | $\vdash$            | -         | -                                   | $\vdash \vdash$ | $\vdash$                            | $\vdash$       |  | Н            |   | $\vdash \vdash \vdash$ | 93        | +               | +                       | +                       | +                  | $\vdash$     | $\dashv$  | $\dashv$           | -        | ⊪            |       | 143        |          | +            | $\dashv$ |          | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |
| 28                   | 45       | =            | $\vdash$            | $\dashv$  | $\dashv$                            | Н               | $\vdash$                            | $\vdash$       | $\vdash$   | Н            |   |                        | 95        | $\dashv$        | +                       | +                       | +-                 | Н            | $\dashv$  | $\dashv$           | -        | ⊪            |       | 144<br>145 |          | +            | $\dashv$ | $\dashv$ | $\dashv$ |          | +        | $\dashv$ | $\dashv$ |
| 29                   | 46       | =            | $\vdash$            | $\dashv$  | Н                                   | $\vdash$        | Н                                   | $\vdash$       | $\vdash$   | $\vdash$     |   |                        | 96        | $\dashv$        | +-                      | ╅                       | +                  | Н            | $\dashv$  | +                  | -{::     | ⊪            |       | 146        | $\dashv$ | +            | $\dashv$ | $\dashv$ | $\dashv$ | -+       | $\dashv$ | $\dashv$ | $\dashv$ |
| 30                   | 47       | =            | $\vdash$            | $\dashv$  | $\dashv$                            | $\vdash$        | Н                                   |                | $\vdash$   | Н            |   |                        | 97        | +               | +                       | +                       | +-                 | ╁┈┤          | $\dashv$  | -                  | -        | ⊪            | -+    | 147        | $\dashv$ | +            | $\dashv$ | -        | -+       | $\dashv$ | $\dashv$ | +        | $\dashv$ |
|                      | 48       |              | 1                   | ᅥ         | $\dashv$                            | $\dashv$        |                                     |                | Н  | Н            |   |                        | 98        | +               | +                       | +                       | ╁╌                 | H            | $\dashv$  | +                  | $\dashv$ | ⊪            |       | 148        | $\dashv$ | +            | $\dashv$ | $\dashv$ | -        | -1       | $\dashv$ | 十        | $\dashv$ |
|                      | 49       |              | $\vdash$            | 7         | $\dashv$                            |                 | Н                                   | Н              | Н  | $\vdash$     |   |                        | 99        | +               | _                       | +-                      | T                  | H            | 十         | +                  | -        | ŀ            |       | 149        | $\dashv$ | +            | $\dashv$ | $\dashv$ | $\dashv$ | -        | +        | $\dashv$ | $\dashv$ |
|                      | 50       |              | $\dashv$            | ┪         |                                     | $\vdash$        | Н                                   | Н              | Н  | $\vdash$     |   |                        | 100       | $\dashv$        | +                       | +                       | T                  | Н            | $\dashv$  | $\dashv$           | -        | ⊪            |       | 150        | $\dashv$ | $\dashv$     | +        | $\dashv$ | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ |
|                      |          |              |                     |           |                                     | اا              |                                     | _              |  |              |   | لـــــا                |           |                 |                         |                         |                    |              |           | L_                 | ۰۰:      | L            |       | . 50 ]     |          |              |          | 1        |          | 1        |          |          |          |